



December 11, 1998

To: Commissioner of Patents and Trademarks
Washington, D.C. 20231

Fr: George O. Saile, Reg. No. 19,572
20 McIntosh Drive
Poughkeepsie, N.Y. 12603

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Subject:

Serial No. 09/186,388 11/05/98

B.H. Lee, Tang Ying, W.H. Rong,
L.T. Hong, Zodig Lam

N TYPE IMPURITY DOPING USING
IMPLANTATION OF P_2^+ IONS OR AS_2^+
IONS

Grp. Art Unit: 2812

INFORMATION DISCLOSURE STATEMENT

Enclosed is Form PTO-1449, Information Disclosure Citation.
In An Application.

The following Patents and/or Publications are submitted to
comply with the duty of disclosure under CFR 1.97-1.99 and
37 CFR 1.56. Copies of each document is included herewith.

S. Wolf et al, "Silicon Processing For The VLSI Era", Vol.
3, Lattice Press, Sunset Beach, CA, 1986, p. 327, discusses ion
implantation using doubly charged species.

U.S. Patent 5,155,369 to Current, "Multiple Angle Implants For Shallow Implant", describes a method of using two doses of ions in an ion beam to provide implantation for shallow junction devices.

Sincerely,

A handwritten signature in black ink, appearing to read "Stephen B. Ackerman", written in a cursive style.

Stephen B. Ackerman,
Reg. No. 37761